

**Figure 1:** Expression of the rat SM MHC -4.2 to +11.6 LacZ transgene in adult mouse SMC tissues. Extremely high expression was observed in virtually all SMC tissues with no expression in non-SMC (see histological evaluations in Fig. 3)

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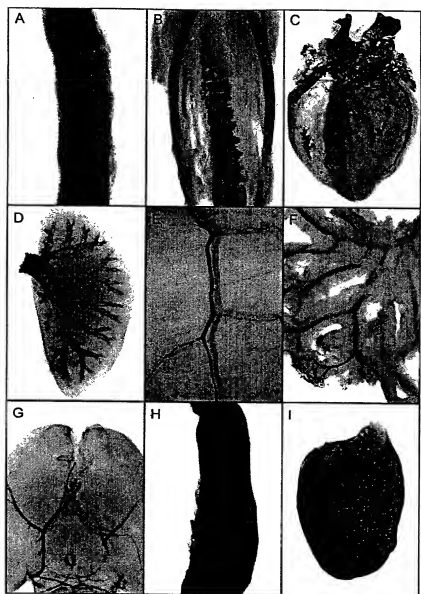


Figure 2

# Histological Assessment of SM MHC- Cre Induced Gene Activation

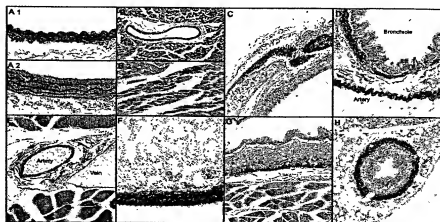


Figure 3

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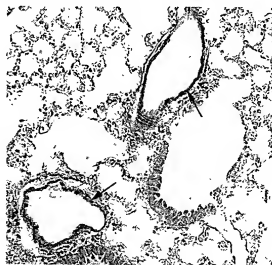
-4.2/+5.3::+7.5/+9 *LacZ*



Figure 4

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Expression of the -4.2 to +5.3/+7.5 to +9.0  
SMMHC LacZ Transgene in Pulmonary  
Arteries/Arterioles of Adult Mice



**Figure 5**

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-4.2/+2.5::+5.3/+11.6



Figure 6

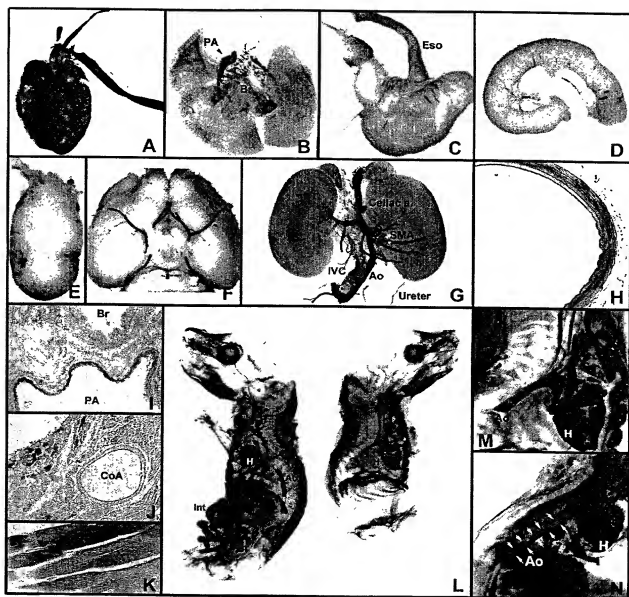
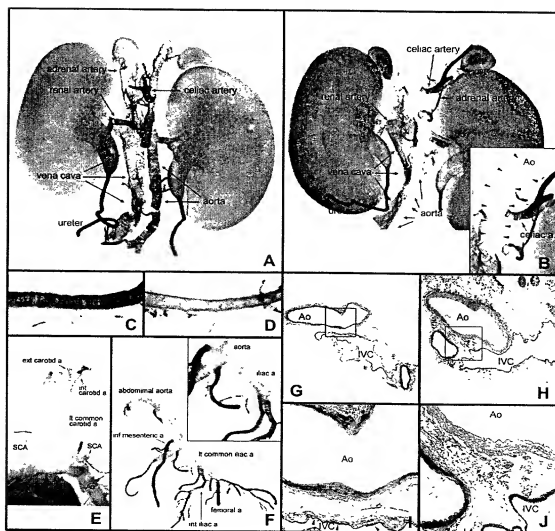


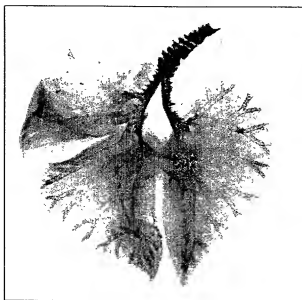
Figure 7



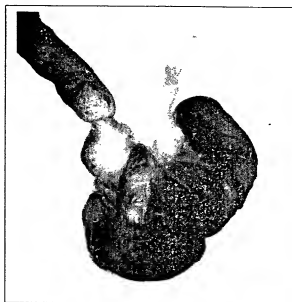
**Figure. 8** Large artery-specific silencing of the reporter gene in intronic CARg mutant mice



Fig. 9. Expression of the Human MHC-5.1/13.5-LacZ transgene in Adult (5-6 weeks old) Mouse Tissues Whole tissues were processed and stained for lacZ expression as previously described (Madsen et al. *Circ. Res.* 82:908-917, 1998).



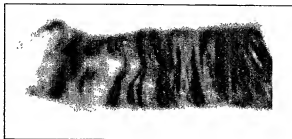
Conducting airways and lungs.



Stomach, small intestine, and esophagus.

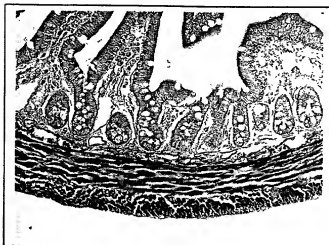


Colon.

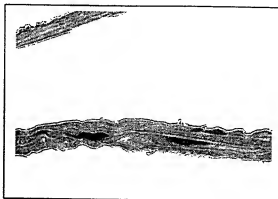


Iliac Artery.

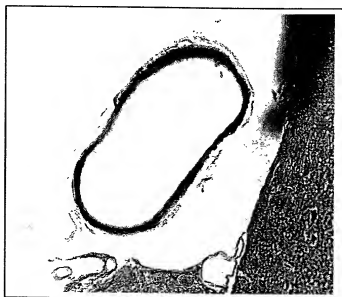
**Figure 10: Histological Evaluation of Expression of the Human MHC-5.1/13.5-LacZ transgene in Adult (5-6 weeks old) Mouse Tissues** Tissues were processed and stained for lacZ expression as previously described (Madsen et al. *Circ. Res.* 82:908-917, 1998).



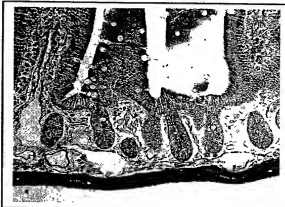
Ileum



Abdominal aorta



Small artery (circle of Willis)



Colon

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# SM MHC 5'-flanking sequence

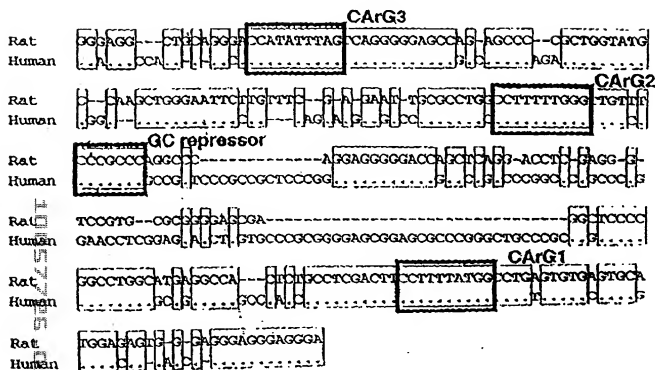


FIG. 11

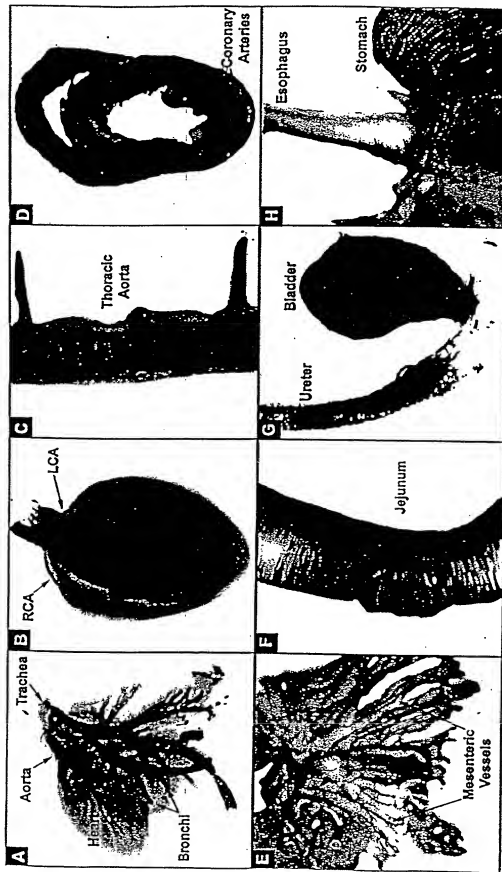


FIG. 12

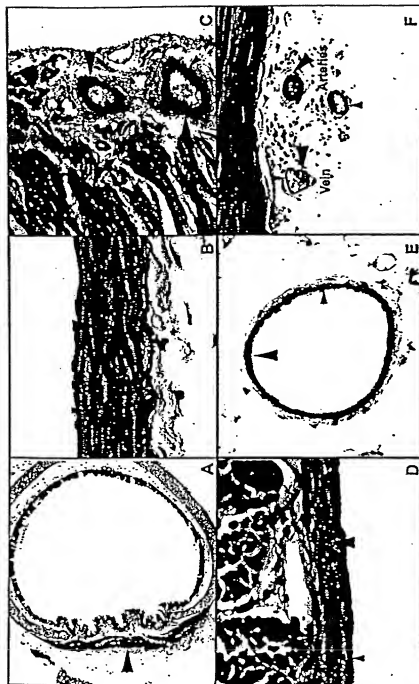


FIG. 13

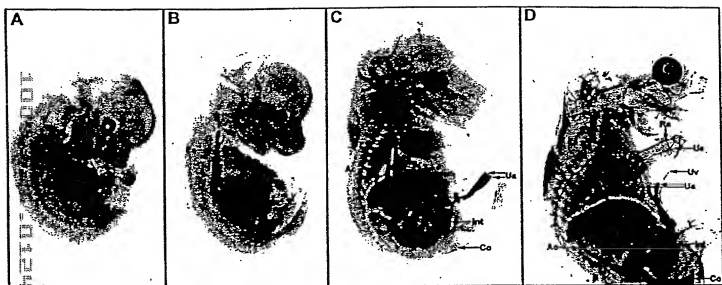


FIG. 14

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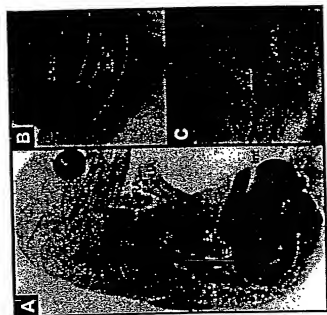


FIG.15

SM MHC-4.2-Intron-LacZ Heart

Anterior

Posterior



FIG. 16

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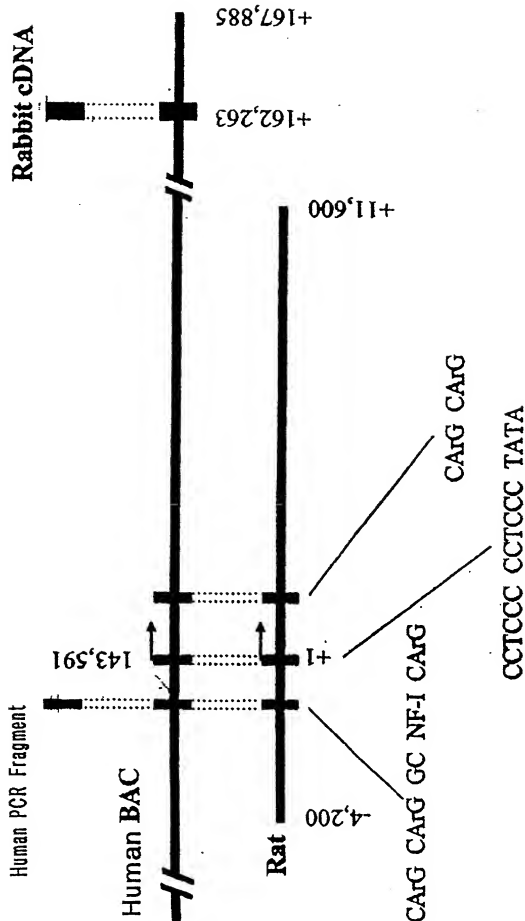
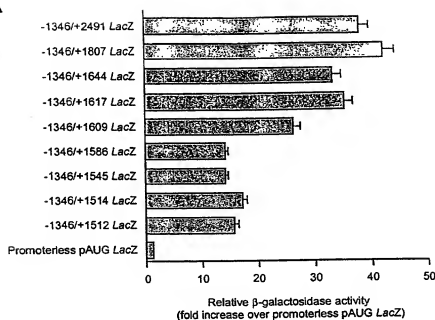


FIG. 17

A



B

Rat +1422 GT GGATG TGGTAGGGTTCCAG GAG GCTGGCGTGATCTCAAAATGCGCTGG  
 Human +1776 AG--G--C--CCA--CCGA-AG-----AAC-T-AA--A--TG-G---TTTC-GA-AAGCC

Rat +1472 GCCAAGC CACCCTGGAGAAACC TGGACTTTTATTATCAGATCTGAAATAGA GCCTC  
 Human +1836 ---G--TTG--T--T-A-A---A--TTT-----TG--C-----TGIGT-A

Rat +1528 TTCCGTACAGGTAGTCACTATGGAT TTATCATTACTTTTCTGTGGGA-GGCTGGGC  
 Human +1896 -----TCTGT-----TTG-----C-----G--A-A-A

Rat +1584 TGGAGGCAGACATGCCCTTGTATGGTAGTGTTTTCTATGAGGCCATTCCCGATCCCCCTT  
 Human +1956 -T-----A-----A-T-----A--C-----C-----G-C-----

Rat +1644 GGCCAATCACCCAGCCTTTCGA TGCAG CC T G ACTGGCTTGAGTTCTGGGTACT  
 Human +2014 C-T--G-T-----G--CC---C--GGT-G-TG-----CCT-GGGATTT--CTA

FIG. 18

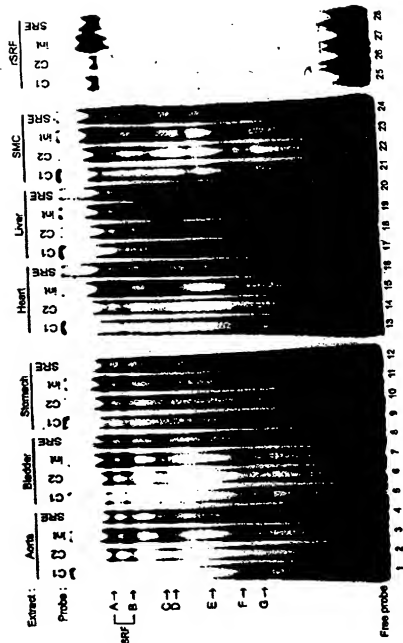


FIG. 19

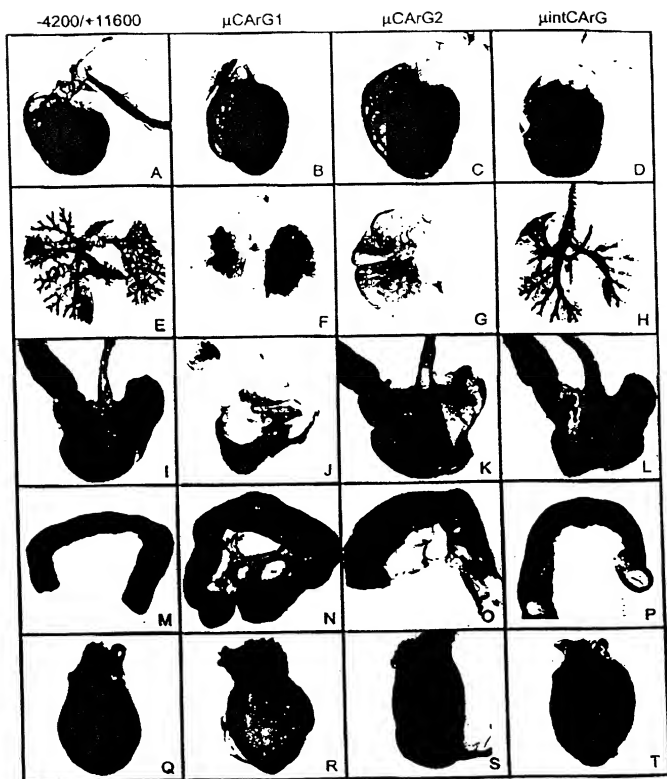


FIG. 20

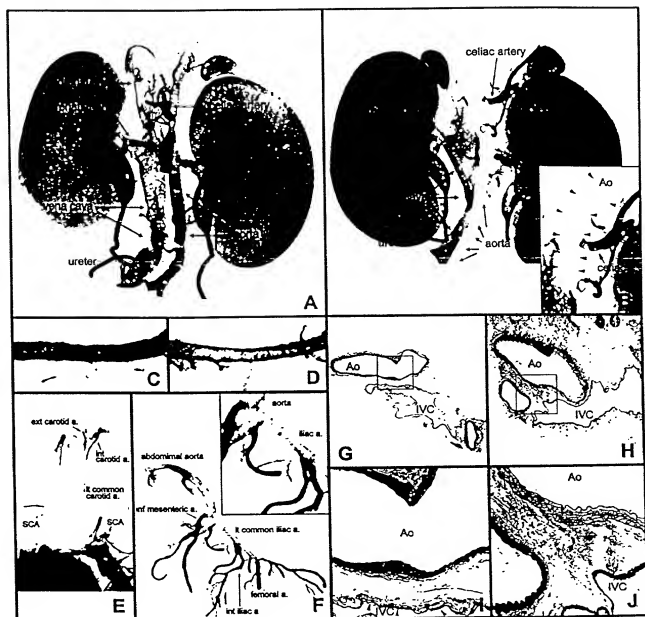


FIG. 21

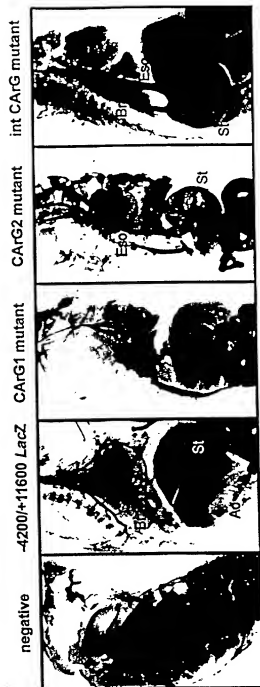


FIG. 22

FIG. 23

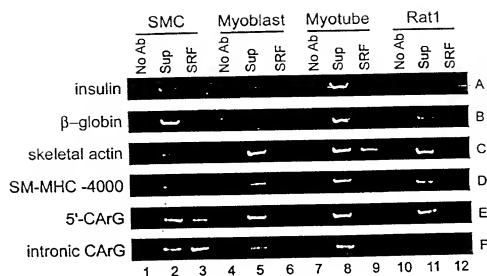


FIG. 24



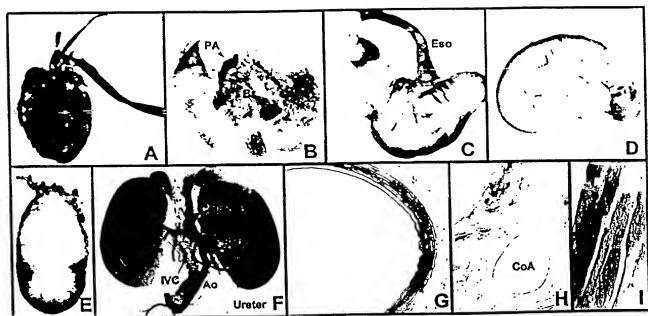


FIG. 25